

**Bremerton Gas Works RI/FS Work Plan
EPA Comments on Cascade's Response to Comments – Marine Investigation Sept.
15, 2016**

General Comments

The following topics were communicated to Cascade in EPA's response document dated 8/10/16. As they are relevant and applicable to both the upland and marine investigations, they are highlighted here:

- 1) The Work Plan needs to have clearly stated objectives and sufficient structure so as not to require constant stops and starts for consultation and to facilitate data evaluation and report preparation;
- 2) EPA is not approving the development of the COPC Screening Memo; and
- 3) The Site investigation work is to evaluate samples for a complete suite of contaminants for all media in initial phase of sampling.

See EPA's 8/10/16 responses that elaborate on these topics.

Marine Investigation

EPA has reviewed Cascade's response-to-comments and revised Work Plan language related to the marine investigation and have concluded that the scope of the marine investigation should be narrowed to focus on characterizing the nature and extent of contamination within the Initial Study Area (ISA).

We have requested clarification of the purpose and intent of identifying data and proposing work outside the ISA and continue to find the explanations unclear, particularly in the context of defining the nature and extent of contamination from the Site. While some of the information/investigation work may be useful as part of the Feasibility Study, EPA believes the focus of the initial work needs to be within the ISA in order to determine whether or not there will be a need to "step out" beyond the ISA to define the nature and extent of contamination. Once more is known about conditions/contamination within the ISA, decisions related to additional data gathering and analysis can be made. This approach will also provide a level of consistency with the upland investigation, where initial investigation work within the ISA will be used to determine the need to "step out" or not.

EPA has the following comments on specific elements of the proposed marine work/Work Plan:

Presentation/Use of "regional" data

Section 3.9 of the Work Plan should be shortened to simply identify the data that has been identified. Since the overall conclusion of this section is that additional data gathering would be necessary to support FS-related activities, there is no need to present nor discuss these data in the Work Plan. We have revised this section accordingly (attached). The current Section 3.9 (and all sub sections) should be replaced with this text.

Sediment Sampling Program

As stated above, all sediment sampling activities should be limited to areas within (or just outside) the ISA. Let's understand what we have in the agreed-upon ISA before venturing outward.

The Work Plan needs to better explain the rationale for selecting the locations for collecting surface grabs and subsurface cores. While EPA does not object with the proposed locations of the cores, there are a significant number of cores proposed immediately offshore of the former gasworks facility, with very few beyond that area. This results in a significant portion of the ISA where subsurface

information is not proposed to be collected. The Work Plan should explain why subsurface cores are not needed beyond those identified, since the nature and extent of sediments potentially contaminated by site-related releases (and transport mechanisms) have not been extensively defined.

Shellfish Surveys

As stated above, the shellfish survey work should be restricted to areas within (or just outside) the ISA. The 11 shellfish survey areas outside the ISA identified on Figure 5-9 should be eliminated from the investigation.

The Work Plan should identify the 5 locations inside the ISA where shellfish survey work is proposed to be conducted, along with the rationale for selecting those specific areas. Note about figures: Figure 5.8 does not show shellfish survey areas within the ISA, as the text indicates. This needs to be corrected.

Figure 5.9 does show proposed shellfish survey areas outside the ISA (not Figure 5-10, as stated in the text). These areas should be eliminated from the figure. We did not receive a Figure 5-10. The figures need to align with discussions in the text.

The Work Plan should better describe how the data gathered through these surveys will be used. Data quality objectives related to identifying potential exposure pathways and/or receptors need to be clearly defined. Given that the risk assessment work plans have not yet been developed, additional data collection needs will be identified at that time.

The Work Plan should better describe how the data gathered through these surveys will be used in characterizing Site conditions. It should also discuss how this information would be used in developing the risk assessments for the Site.

Sediment Transport Characterization

The currently proposed work does not explain how the video survey and tidal current evaluation will be used to understand/define sediment transport away from or onto the area offshore of the former gas plant. Will the information gathered be used in conjunction with other information to conduct sediment transport modeling? The work plan should describe the methodology that will be used to determine the physical movement of sediments.

The Work Plan places a significant focus on sampling and understanding the chemistry of sediments outside the ISA. This element of the marine investigation should be removed from the work program (and Work Plan), as it is premature given our current lack of understanding of conditions within the ISA. While a better understanding of sediment chemistry outside the ISA (or Site, if we can define it) may prove helpful during the Feasibility Study, this type of work should be undertaken if, or when, such information is determined to be needed.

These comments were discussed in detail in the 9/30/2016 meeting. Refer to the response to comments for the 9/30/2016 meeting notes for specific updates to the work plan in addressing this comment.